DI 110
Radiographic Procedures & Positioning:
Chest & Abdomen

LBCC Diagnostic Imaging Program
Summer 2021

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Office Hours: By appointment. Email to set up a mutually convenient time.

COURSE DESCRIPTION

This course focuses on radiographic positioning and procedures for the chest and abdomen. The lab portion includes peer positioning, film critique, anatomy, and the utilization of equipment to perform procedures on phantoms.

MOODLE

We'll be using Moodle for this class. Before logging in for the first time, you will have to claim your account at https://identity.linnbenton.edu/. If you have any problems logging into Moodle, please contact the **Student Help Desk** by calling **541-917-4630**, texting **541-704-7001**, emailing student.helpdesk@linnbenton.edu or logging into a live Zoom video call https://linnbenton.zoom.us/j/5419174645 (staffed Monday through Thursday 9am to 7pm and 11am to 3pm Friday through Sunday).

REQUIRED TEXTS

- ***Bontrager's Textbook of Radiographic Positioning and Related Anatomy, Tenth Edition***, by John P. Lampignano and Leslie E. Kendrick. (*Provided*)
- ***Radiographic Image Analysis, Fifth Edition*** by Kathy McQuillen-Martensen (*Provided*)

BASIC NEEDS STATEMENT

Any student who has difficulty affording groceries or food, or who lacks a safe and stable place to live, is urged to contact a **Student Resource Navigator** in the Single Stop Office (T-112): **Amanda Stanley**, stanlea@linnbenton.edu, 541-917-4877. The navigator can connect students to resources. Furthermore, please **talk with your instructor** if you are comfortable doing so. This will enable them to provide any resources that they may have.

SCHEDULE

- **Class** is normally held in **real time** in the Virtual Classroom on **Mondays 11:00 a.m. to 1:15 p.m.**
  - Here is the link to the Traditional summer term schedule.
    - Week 0 Week 1 Week 2 Weeks 3-8 Week 9
  - Here is the link to the Distance Education (DE) student summer term schedule.
    - Week 0 Week 1 Week 2 Weeks 3-8 Week 9
  - The TRAD/DE schedule for Week 10 will be provided by July 31, 2021.
- It is expected **students will attend all lectures**. Lectures are ***not recorded***.
  - Live lecture will not be conducted on **Monday, July 5th** in recognition of the **Fourth of July holiday**. A **recorded lecture** will be **substituted**. Students will be expected to **review** the **recorded lecture *prior*** to attending **lab** on Tuesday, July 6th (Traditional students) or Thursday, July 8th (distance education students).

- **Labs** differ slightly depending on whether the student is classified as a traditional (TRAD) student or a distance education (DE) student. Regardless of whether a student is classified as TRAD or DE, **lab attendance is mandatory.**
    - **TRAD Students:** Labs are conducted on-site at the **HOC X-Ray Lab** at the **Healthcare Occupations Center**. Students are assigned both a **specific instructor-led lab time** *and* **two**, **three-hour practice times**.
        - Instructor-led labs *may not* be traded/switched**.**
        - Practice labs *may* be traded or switched; see the **Summer Practice Lab Trading Policy.** Students were **notified** of **assigned instructor-led lab and practice lab times via email** on **May 14** and **May 24, 2021**, respectively.
        - **Here is the link to the summer term lab schedule**.
            - TRAD instructor-led labs are scheduled for **Tuesdays**
            - **Orientation lab** will be held on **Tuesday, June 22nd**. **Lab times are extended on this day.** Students will be expected to attend their assigned lab time. This is a mandatory lab session. Work will be assigned that cannot be made up. Review the **week 0 schedule**.
            - **Note that during week 1**, only **the instructor-led lab** will be held. No practice labs are scheduled this week.
            - During **week 2**, only **one practice lab session** will be held (either Tuesday night or Thursday.) Students should attend their **first scheduled practice lab session**.
            - The **regular weekly lab and practice lab schedule** will commence **July 12th** and continue through **August 27th**.
    - **DE Students:** Labs are scheduled *at the convenience of the clinical site*. Check with your mentor regarding your specific lab day and time. Expect to spend a ***minimum*** **of eight hours per week** at the clinical site.
        - Distance sites typically schedule labs for **Thursdays**. Please check in with your clinical instructor for the specific day/time that works best for them.
- **Weekly quizzes (Quiz #; e.g., Quiz 1, Quiz 2, etc.)** are typically held during class on **Mondays.**
    - The password for the weekly quiz will be given in the **Virtual Classroom** at 11:00 a.m. after students have shown their workspaces. Make sure you are logged in to Moodle a few minutes early to take your quiz promptly at **11:00 a.m**. Class will begin on Mondays in the **Virtual Classroom** once the quiz is over.
    - Students will be required to download software that will allow the **Respondus Lockdown Browser** to run on their computer in order to take quizzes in Moodle. This software will be available for students to access inside Moodle.
    - A **Module 0 quiz** is required. However, students will be able to decide when to take it. The quiz will be open between **Saturday, June 19th at 12:00 pm** and **Sunday, June 27th at 11:59pm**. Students who choose to not take the quiz during this window of time will not be able to make it up.
    - Due to the **Fourth of July** holiday, students will be required to take **Quiz 1** on **Monday, July 5th** between **12:00am and 11:59pm**. Students are expected to take the quiz *without* resources and with integrity.

- **Anatomy Quizzes (Quiz #A; e.g., Quiz 2A, Quiz 3A, etc.)** are scheduled at different times for DE and TRAD students due to the variability in lab schedules for each distance clinical site.
    - **TRAD Students:** Quiz #A are given **during instructor-led labs on Tuesdays**. Students will rotate through the Quiz #A station as a part of lab.
    - **DE Students:** Quiz #A are held on **Fridays** at **9:00 am** in the **Virtual Classroom** beginning on Friday, July 9th. DE students are expected to log into the virtual classroom and Moodle a few minutes early. The password for the weekly quiz will be given in the **Virtual Classroom** at **9:00 am** by the quiz proctor after students have shown their workspaces. If a DE student does not take the quiz in the virtual classroom during the designated time, the student will take a zero and not be able to make it up.
- **Pop quizzes** may be given at any time in the **Virtual Classroom** or the lab at the instructor's discretion.
    - **DE students**: Pop quiz questions may be built into the anatomy quizzes.
- The **final exam** and **practicum** will be scheduled for the week of **August 30 through September 3, 2021 on-site at the HOC in Lebanon**. The final exam schedule will be made available to students via email by **July 31st**.

CONTACTING THE INSTRUCTOR

Email is the best way to contact the instructor for this class. Emails received between 8:00 a.m. Monday and 5:00 p.m. Friday are generally returned within 24 hours. Emails received after 5:00 p.m. on Friday, or on Saturday or Sunday will be returned on Monday mornings.

Students who call and leave a message on the instructor's office phone should be aware that the instructor is only at the Healthcare Occupations Center 1-2 days/week. Students wishing for a sooner response should email the instructor.

Office hours are held by appointment. Please email to arrange a mutually convenient time. By appointment office hours may take place in the **Virtual Office**, via phone or in person depending on instructor and student schedules.

STUDENT EXPECTATIONS

- **YOU are RESPONSIBLE for your own LEARNING.**
- **We provide the structure for that learning, but it is up to you to decide how much or little you get out of the class. It is imperative that you understand PRACTICE MAKES PERFECT. The more you practice both the written assignments and the hands-on assignments, the more successful you will be with graded assignments, with the final exam, and eventually in your clinical placement.**
- **Positioning and procedures courses are intense, multi-faceted, hands-on courses designed to provide the student with a variety of resources for learning.**
- **LBCC faculty provides the classroom lecture and instructor led lab portion of the course.**
- **Each student is required to spend <u>extra</u> time practicing on his/her own at home to become proficient.**
- **If you do not understand something or need clarification, it is <u>your</u> responsibility to ask for assistance.**
- **There are specific deadlines, so this course is <u>not</u> self-paced. It is up to the student to keep up with his/her assignments and deadlines.**
- **Issues with technology are not valid reasons for turning in late work.**
- **<u>No late work is ever accepted</u>.**

COURSE OBJECTIVES

- Describe standard positioning terms.
- Describe the general purpose of radiographic studies.
- Discuss general procedural considerations for radiographic exams.
- Discuss equipment and supplies necessary to complete radiographic procedures.
- Explain the routine and special positions/projections for chest and abdomen radiographic procedures.
- Describe the steps in performing various mobile procedures.
- Summarize the importance of proper positioning.
- Discuss the impact of patient preparation on the resulting radiographic image.
- Critique orders, requests and diagnostic reports.
- List the information to be collected prior to a patient examination.
- Assess the patient and record clinical history.
- Identify methods and barriers of communication and describe how each may be used or overcome effectively during patient education.
- Modify directions to patients with various communication problems.
- Explain radiographic procedures to patients and family members.
- Simulate radiographic procedures on a person or phantom in a laboratory setting.
- Explain the role of ethical behavior in health care delivery.
- Provide patient-centered clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity or culture.
- Demonstrate proper use of positioning aids.
- Adapt general procedural considerations to specific clinical settings.

- Select technical factors to produce quality diagnostic images with the lowest radiation exposure possible.
- State how to properly reposition the patient when chest and abdomen projections with poor positioning are produced.
- Describe the role of the radiographer in image analysis.
- Discuss the elements of a radiographic image.
- Identify anatomy on radiographic images.
- Describe an effective image analysis method.
- Critique images for appropriate anatomy, image quality and patient identification.
- Critique the radiographic contrast within various radiographic images.
- Analyze the relationship of factors that control and affect radiographic contrast.
- Assess radiographic density on radiographic images.
- Analyze the relationships of factors that control and affect image density.
- Critique images for appropriate technical, procedural and pathologic factors, and employ corrective actions if necessary.
- Identify common equipment malfunctions that affect image quality, and corrective action.
- Differentiate between technical factor problems, procedural factor problems and equipment malfunctions.
- Differentiate between size and shape distortion.
- Analyze images to determine the appropriate use of beam restriction.
- Apply a problem-solving process used for image analysis.
- Apply a process for evaluating images for acceptable limits of distortion, image artifacts, radiation fog, noise and gross exposure error.
- Apply a process for evaluating images for adequate image receptor exposure, exposure indicator contrast/grayscale/spatial resolution, identification markers and appropriate use of beam restriction.
- Describe the ALARA concept.
- Identify and justify the need to minimize unnecessary radiation exposure of humans.
- Explain the objectives of a radiation protection program.
- Apply general radiation safety and protection practices associated with radiographic examinations.
- Use the appropriate method of shielding for a given radiographic procedure.
- Describe the composition and characteristics of bone.
- Identify and locate the bones of the human skeleton.
- Describe articulations of the axial and appendicular skeleton.
- Label different types of articulations.
- Compare the types, locations and movements permitted by the different types of articulations.

COURSE OUTLINE *B=Bontrager* *M=McQuillen* **DE lab times are site dependent*

Week/ Module	Date	Topic	Reading Assignment*	HW	Assignment	Assessment
0	M 6/21 to F 6/25	Orientation & Vocabulary	Syllabus Become familiar with Bontrager & McQuillen textbooks (see specific things to review on the "Required Reading" tab in Module 0) **Study skills article** **Study skills video**	**HW 0 (DE or TRAD)** **HW 0 Vocab** **Lesson: Intro to Radiography** **Lesson: Intro to Film Critique**	**Photo challenge discussion post due by SUN 6/27 @ 11:59pm** **TRAD/DE Lab Policies & Procedures due by SUN 6/27 @ 11:59pm**	**Quiz 0 TRAD/DE due by SUN 6/27 @ 11:59pm**
0	T 6/22 TRAD DE*	Orientation Lab: ABC's of Radiography			**TRAD: Positioning Assignment (PA) 0 due by start of assigned lab on TUES 6/29** **DE: PA0 due via email by 9am on TUES 6/29**	
1	M 6/28	Intro to Positioning	B 1-68 M 1-37 **ARRT Standards of Ethics**	**HW 1** **HW 1A** **Lesson: Intro to Positioning**		**Quiz 1** **MON 7/5 TAKE BETWEEN 12:00 am and 11:59 pm**
1	T 6/29 TRAD DE*	Lab 1 Intro to Positioning			**TRAD: PA1 due by start of assigned lab on TUES 7/6** **DE: PA1 due via email by 9am on TUES 7/6**	

2	M 7/5 ***No live class*** ***Fourth of July holiday***	Supine & Portable AP Chest ***Review recorded lecture***	B 71-89, 94 M 104-110	**HW 2** **HW 2A**		**Quiz 2** **MON 7/12** **@ 11:00am**
2	T 7/6 TRAD DE*	Lab 2: Supine & Portable AP Chest			**TRAD: PA2 due by end assigned lab on FRI 7/9** **DE: PA2 due via email by 11:59pm on FRI 7/9**	**Quiz 2A** **TRAD:** **TUES 7/6** **DE:** **FRI 7/9** **@ 9:00am**
3	M 7/12	PA, Lateral & Lordotic Chest	B 71-89, 90-93 M 81-104	**HW 3** **HW 3A**		**Quiz 3** **MON 7/19** **@ 11:00am**
3	T 7/13 TRAD DE*	Lab 3: PA, Lateral & Lordotic Chest			**TRAD: PA3 due by end assigned lab on FRI 7/16** **DE: PA3 due via email by 11:59pm on FRI 7/16** **ALL: VA3 due by SUN 7/18 @ 11:59pm**	**Quiz 3A** **TRAD:** **TUES 7/13** **DE:** **FRI 7/16** **@ 9:00am**
4	M 7/19	Ribs	B 360-362, 364-367, 374-376 M 522-530	**HW 4** **HW 4A**		**Quiz 4** **MON 7/26** **@ 11:00am**

4	T 7/20 TRAD DE*	Lab 4: Ribs			**TRAD: PA4 due by end assigned lab on FRI 7/23** **DE: PA4 due via email by 11:59pm on FRI 7/23** **ALL: VA4 due by SUN 7/25 @ 11:59pm**	**Quiz 4A TRAD: TUES 7/20** **DE: FRI 7/23 @ 9:00am**
5	M 7/26	Abdomen	B 104-118, 120, 123-124 M 138-149	**HW 5** **HW 5A**		**Quiz 5 MON 8/2 @ 11:00am**
5	T 7/27 TRAD DE*	Lab 5: Abdomen			**TRAD: PA5 due by end assigned lab on FRI 7/30** **DE: PA5 due via email by 11:59pm on FRI 7/30** **ALL: VA5 due by SUN 8/1 @ 11:59pm**	**Quiz 5A TRAD: TUES 7/27** **DE: FRI 7/30 @ 9:00am**
6	M 8/2	Decubitus Chest/ Abdomen & Lateral Abdomen	B 104-115, 119, 121-124 M 110-115, 149-151	**HW 6** **HW 6A**		**Quiz 6 MON 8/9 @ 11:00am**

6	T 8/3 TRAD DE*	Lab 6: Decubitus Chest/ Abdomen & Lateral Abdomen			**TRAD: PA6 due by end assigned lab on FRI 8/6** **DE: PA6 due via email by 11:59pm on FRI 8/6**	**Quiz 6A TRAD: TUES 8/3** **DE: FRI 8/6 @ 9:00am**
7	M 8/9	Pediatric & Geriatric Chest & Abdomen	B 620-622, 626-628, 630-634, 643-646 M 107-108, 121-138, 152-159	**HW 7** **HW 7A**		**Quiz 7 MON 8/16 @ 11:00am**
7	T 8/10 TRAD DE*	Lab 7: Pediatric & Geriatric Chest & Abdomen			**Professional Evaluation due electronically by 9:00 am on WED 8/11** **TRAD: PA7 due by end assigned lab on FRI 8/13** **DE: PA7 due via email by 11:59pm on FRI 8/13**	**Quiz 7A** **TRAD: TUES 8/10** **DE: FRI 8/13 @ 9:00am**
8	M 8/16	Sternum	B 360-363, 368-369 M 516-522	**HW 8** **HW 8A**		**Quiz 8 MON 8/23 @ 11:00 am**

8	T 8/17 TRAD DE*	Lab 8: Sternum			**TRAD: PA8 due by end assigned lab on FRI 8/20** **DE: PA8 due via email by 11:59pm on FRI 8/20**	**Quiz 8A** **TRAD:** **TUES 8/17** **DE: FRI 8/20 @ 9:00am**
9	M 8/23	Final Review		**HW 9** **HW 9A**		
9	T 8/24 TRAD DE*	Lab: Final Review	B All reading to date M All reading to date			**FINAL ANATOMY** **TRAD:** **TUES 8/24** **DE: FRI 8/27 @ 9:00am**
10	M 8/30 to F 9/3	Finals Week		NONE	**NONE**	**FINAL EXAM & PRACTICUM DATE/TIME TBA**

CLASS ATTENDANCE

Students are expected to attend scheduled **Virtual Classroom** sessions provided by LBCC faculty for this course at the scheduled time. Students will be called upon during class. Students enrolled in Virtual Classroom sections of the course are required to participate utilizing a webcam.

- Lectures will NOT be recorded. Interaction during lecture is an integral part of each lecture and cannot be substituted.
- Students are expected to complete weekly required text readings **prior** to **Virtual Classroom** sessions with the LBCC faculty.
- Students may access the Virtual Classroom for this course at **https://zoom.us/j/9519289278**
- Students should bookmark this link in several browsers (Mozilla, Chrome, etc.) so that it is available should access to the classroom via Moodle unavailable for any reason.
- Students with smartphones are encouraged to download the Zoom app to use as a backup plan for accessing a live class session should internet service on the student's computer be interrupted.
- If the student has difficulty accessing the Virtual Classroom or other tech issues related to the Virtual Classroom, the student should call **Zoom Tech Support at 1-888-799-9666 extension 2**.

VIRTUAL CLASSROOM EXPECTATIONS

1. Students must have a **headset with an attached microphone on at all times**. Do not talk into the computer's built-in microphone or use your computer's speakers to hear class! Feedback is a major issue and can be avoided by wearing a headset.

2. Arrange yourself in your work space in such a way that **you are well lit** and **easy to see at all times**. Your back should not be to a window or other bright light source.

3. You must be **on webcam at all times**. We need to see your **entire face**. The top of your head or just your eyes does not suffice!

4. You will be required to **show your workspace prior to each quiz**. Your workspace should be clean with no books/papers/etc open or around. Your cell phone should be put away.

5. Your **webcam** must be **able to show your workspace**. For some students, this may mean you have to purchase a separate webcam that attaches to your computer.

6. When asked to show your work space, do so in a **slow and deliberate sweeping motion** so we can see the whole area. This should take about **5-7 seconds**. Doing it too quick negates the purpose and you may be asked to do it again if you go faster than this.

7. If you have a **question or a comment**, please **raise your hand**.

8. Please **mute your microphone** unless it is your turn to talk.

9. Students are expected to treat the virtual classroom like a **traditional classroom**. It is essential students **make arrangements** to **attend class** in a **distraction-free space**. Household chores, babysitting, maintenance appointments, watching TV (or having a TV on in the background), etc. should *not* be performed or scheduled during class time.

    a. Ask yourself: Would I _____ in a traditional classroom?

    b. **If the answer is no, then it should not be done in the virtual classroom either.**

10. Student **participation** in the virtual classroom is **evaluated each term** on the student's **professional evaluation** and students will receive a **score** to reflect the level to which they were **engaged** and **participated** in the virtual classroom.

LAB ATTENDANCE

Students are expected to come prepared for hands-on lab by having attended lecture, having reviewed the positioning videos, by having read the required text material, and by having questions already prepared for the instructor. Approximately two and one quarter hours per week of lab instruction is provided by a registered radiologic technologist (R.T.(R)).

Phantoms and manikins are provided, and are used to evaluate positioning. Students are expected to treat the phantoms and manikins with extreme care. Phantoms are costly and should be treated as if they were a fragile, elderly patient.

- **ALL STUDENTS**
  - Prior to attending lab, all students are asked to perform a **self-check** for **COVID-19 symptoms**.
    - **Stay at your residence if you have COVID-19 symptoms** and contact **Carley (hansenc@linnbenton.edu**), **Paula** (**merinop@linnbenton.edu**) *and* **Jen** (**claytoj@linnbenton.edu**) via **email** to notify us of your **impending absence**.
      - **DE students** should *also* contact their **clinical mentor** at their clinical lab site.
    - **COVID-19 symptoms** include the following:
      - Primary symptoms of concern: cough, fever or chills, shortness of breath, or difficulty breathing
      - Other non-specific symptoms associated with COVID-19 include muscle pain, headache, sore throat, new loss of taste or smell, diarrhea, nausea, vomiting, nasal congestion, and runny nose.
- **DE Students**
  - Plan to arrive at your clinical site **10 minutes prior to the start of your scheduled lab time**. Please follow your clinical site's guidelines in regards to donning PPE, temperature checks, and any other protective measures in place.
  - Please review the **DE Lab Attendance Policy and Expectations**
- **TRAD Students**
  - TRAD students will arrive at the **east door** of the HOC *no more than 15 minutes* and *no less than 10 minutes* prior to the start of the student's scheduled lab time.
  - Students will **practice good social distancing** and enter the **east entrance** of the building. Students will **swipe their badge keycard** (issued at the Orientation lab on 6/22) to enter the building.
  - **Masks are required to be worn at all times in the HOC until further notice.**
    - Students must be **wearing a mask covering *both* their nose and their mouth** to **enter** the **HOC**.
    - Students will ***not be permitted to participate*** in any lab activities **without a mask**.
    - Students will be allowed to take one mask per week from lab supplies to supplement their personal mask supplies.
      - Masks will be placed on a table outside the x-ray lab for students to take **one if they need it**.
  - The student should use the remaining time to **put their things in their locker**, use the restroom if necessary, **wash their hands** in the restroom or surgery area, and *then* **enter the lab** and **clock in**.

- Once in the lab, the student should check to see if any **pre-lab tasks** have been assigned to them by checking the **lab responsibilities** list posted in the lab on the cork board.
    - This process is intended to allow lab to start promptly on time with all participants present, with clean hands, masked up, with equipment warmed up and all students ready to begin lab activities.
- TRAD students: Please review the three documents linked below:
    - **Lab Expectations**
    - **Lab Rules**
    - **Lab and Practice Lab Schedule**

MODULES

This course has one module per week inside Moodle. Each module is made available on Saturday afternoons at 12:00 p.m. Module 0 will unlock at 12:00 p.m. on Saturday, June 19th. Module 1 will unlock on Saturday, June 26th. Module 2 will unlock on Saturday, July 3rd, etc. Your instructor is often working on the next module during prep time on Fridays and even up until unlock time on Saturday morning. Unlocking the module earlier than Saturday morning would require your instructor to email students multiple times about changes. Students desiring to get a headstart on the next week's content may consult the syllabus for the required reading assignment and get started on that.

IMPORTANT: Students are **expected** to review the "**Module # Information**" **book** (look for the green book icon) linked inside each Moodle module. **Other activities within that module will not unlock until after the student has reviewed the relevant module information**. If you discover you cannot see the module's homework, assignment and quiz, **go back to the "Module # Information" link and review each of the pages contained within it**. Once you've done that, the rest of the content will be unlocked and available to you.

MOODLE HELP

Help with **Moodle** is available via the **Student Help Desk** in the LBCC main campus Library. The hours are **Monday through Thursday 8:00 a.m. to 4:00 p.m**. To speak with support staff during these hours call **541-917-4630** or email **student.helpdesk@linnbenton.edu**.

If LBCC tech support is **not available** or is **unable to help** with any **Moodle issues**, please contact the instructor via email at **hansenc@linnbenton.edu** with a **description of the problem**, what you've **tried** and what **browsers** you've used.

ONLINE RESOURCES/LINKS

This hybrid online course contains many links. A concerted effort is made to ensure all materials are accessible. However, if you discover a link to be broken or missing, *first* check it in another browser. Sometimes things work in Mozilla but not Chrome or vice versa. **Use of Internet Explorer is strongly discouraged**. If you have checked it in at least two browsers and discover that it is still not functional, please email the instructor to let her know which link is broken/non-functional, which browsers you have checked and where the specific link is located so the problem may be remedied.

PRINTING

The **LBCC Campus Store** is providing **printing services** for students who need them. To use this service, students should email **printing@linnbenton.edu** with their **document as an attachment**. The LBCC print shop will print it for them, and **notify** them when it is **available** for **picku**p at the LBCC Campus Store's **curbside location**. Students should direct questions about **printing costs** to **printing@linnbenton.edu** as well.

ASSIGNMENTS

Students will be required to attend class as scheduled in real time in the Virtual Classroom, participate in weekly positioning labs at either the HOC X-Ray Lab in Lebanon or at an assigned distance clinical site, complete weekly reading assignments, submit online ungraded homework assignments, take weekly graded quizzes, record and assess themselves positioning volunteer patients (i.e., other students, distance clinical instructors or willing family members/friends), perform a self-evaluation of their recorded exam, submit and evaluate phantom x-ray images and complete other assignments /projects as given. A final practicum and written final exam are also a large portion of the grade. Assignments must be completed/submitted by the due date in order to be graded.

Please allow *up to one week from the due date* for the quiz to be graded and returned. Late work is not accepted.

PROFESSIONAL EVALUATION (0 POINTS)

As discussed at orientation, student conferences will be conducted on certain dates throughout the school year, beginning with summer term. These conferences will last 15 minutes each and you will be informed of your scheduled time for summer term by July 31st so that you may make arrangements to attend your conference.

At these conferences, we will check in with you and discuss your progress and performance in the program. Here is the **link to the working draft of the self-evaluation form**; you will be notified via email when it has been finalized for Summer term.

Having these conferences and discussing the items on the list is just another way for us to help make sure students are on the right track. The things that are on this evaluation form relate to many of the "soft skills" that employers value. In fact, many items came directly from evaluation forms that are used by HR and imaging departments to evaluate working technologists on an annual or semi-annual basis. Again, it's not enough to just know your positioning and have a good understanding of radiation physics; **you also have to also be able to communicate effectively and work well with others.**

Students will perform a **self-assessment** and **complete it electronically in the student's specific assigned Google Drive document.** Students will notify program faculty (Carley Hansen Prince, Paula Merino and Jennifer Clayton) **via email** when they have **completed** their self-assessment no later than **9:00 a.m. on Wednesday, August 11th**. Diagnostic Imaging faculty (and clinical instructors for distance students) will also provide feedback so our perceptions of your performance may be shared with you.

Although this evaluation does not count for points during summer term, it will be worth points in fall and winter terms. Ultimately, the final evaluation form will be utilized to help assess **student readiness** for **clinical externship**.

> **IMPORTANT:** During the **winter term** of the program, students must earn a **75% or higher on this evaluation** in order to **progress** onto **clinicals**. Students who receive *less* than a 75% on the final evaluation winter term *will not* progress onto clinicals.

HOMEWORK (9 HW @ 0 POINTS EACH = 0 POINTS)

There will be weekly *ungraded* homework assignments for students to use as a study tool. The homework assignments allow the student to determine how well they understand the material and are provided as an additional study resource for the critical thinking assessments and for the final exam. Homework will be made available online within the Moodle class Saturday afternoons at 12:00 p.m. the week it is assigned and must be completed by the following Sunday night at 11:59 p.m. Homework may be completed and submitted multiple times. Make sure to "submit" each time you take it or you will be locked out. The homework assignments are provided as practice. They will allow almost instantaneous feedback, so that students may see if there are specific areas that need additional study/review. Students will have access to online homework questions for every topic covered in class. The material covered in the homework can come from the textbooks, lectures, homework and prepared activities. The homework assignments may be completed using whatever resources are available. Homework banks are provided by the textbook publisher and an effort is made to ensure it is correctly keyed. However, should a student discover an answer does not make sense for a given question after looking it up, he/she should alert the instructor to the error so a correction can be made.

QUIZZES (9 QUIZZES @ 10 POINTS EACH = 90 POINTS)

Quizzes assess content from the previous week's reading material, class activities, lab and lecture. **All quizzes are expected to be taken with integrity.** This means they are **closed note/closed book** and provide a true assessment of your learning. Quizzes may only be taken **once**. With the exception of the Week 0 & Week 1 quizzes (see the Course Outline above), quizzes will typically be given **once a week** on **Mondays** during the **first 10 minutes** of class beginning at 11:00 a.m.

Taking quizzes and other online assessments with integrity is one way in which you demonstrate your ability to abide by the 8th item of the ARRT Code of Ethics:

"The radiologic technologist practices ethical conduct appropriate to the profession."

The amount of time given for a quiz may vary depending on the number of questions. Students are encouraged to login to Moodle and the Virtual Classroom 5-10 minutes early. The **password** for the quiz will be given inside the Virtual Classroom once students have done a "sweep" of their workstations to demonstrate that no notes, books, cell phones or other resources are at their workstation. Once the password has been given, students will need to click over to the quiz inside the P&P class in Moodle and take it. The assessment has a maximum of 10 minutes allowed. **Students not logged into class by 11:05 a.m.** will *not* be given the password or have access to the quiz. Students not finished when time is up will not be granted additional time and will be "kicked out" of the assessment.

The guideline we use for determining the amount of time to be used for an assessment is based on the following:

- 1 minute (60 seconds) for each multiple-choice, true/false, or fill-in-the blank question
- 2 minutes (120 seconds) for each matching or short answer question
- 3 minutes (180 seconds) for each essay question

We have developed this time guideline to help students be successful when taking the national licensing exam given by the ARRT. **The ARRT exam allows *less than one minute per multiple choice question*.** To help students best prepare for this capstone exam and entry into the profession, we have found it **important** to **help students prepare** by **getting used** to **one minute per multiple choice question during the duration of the program**.

Students will need to use their time wisely when taking assessments. **Don't spend too much time on any one question.** Answer the questions you know first and skip the ones you don't initially know. Once you have gone through the entire assessment, go back to answer any unanswered questions. Any questions that are not answered when time is up may not be made up or completed later, so **it's a good idea to record your best guess.**

Quizzes are **closed note, closed book assessments** and may only be taken once. All students are expected to take quizzes with **integrity**, jeopardizing neither their own work, nor that of others. Once a student begins taking a quiz, they **must finish**. The assessment *may not* be saved and resumed at a later time.

Class will resume after the quiz is scheduled to be over inside the Virtual Classroom. Class will not wait for students who are late finishing assessments.

Please allow **up to one week from the due date** for the quiz to be **graded and returned**.

ANATOMY QUIZZES (8 QUIZ #A @ 15 POINTS EACH = 120 POINTS)

Anatomy quizzes (Quiz #As; e.g. Quiz 2A, Quiz 3A, etc.) will be given once a week. Quiz #As are computer-based assessments that evaluate student knowledge of radiographic anatomy and positioning errors. Each anatomy question is worth 1 point.

SPELLING ALWAYS COUNTS The professional expectation is that radiologic technologists can spell technical and anatomical words correctly. Most software used for typing tech comments/notes in the workplace *does not* have a spell checker, so it is essential students be able to spell correctly. It is also important to include details in regards to side and level as requested.

- Students misspelling any word on an anatomy quiz will lose 0.5 points per misspelled word.
- Students who leave off the side of the body ("right" or "left") when appropriate (e.g. *right* costophrenic angle versus *left* costophrenic angle) will also lose 0.5 points.
- The level is also important to identify when appropriate (e.g, C5 versus T5 versus L5). A missing level or incorrect level will lose 0.5 points.
- If a question asks "What part of what bone is located at #?" and only the name of the bone is given and not the specific part of that bone as well, 0.5 points will be taken off.

Although there is the potential to lose more than one point on any given question due to spelling, mismarking (right versus left), level errors, etc., a *maximum* of only one point will be taken off per question.

A video explaining what to expect in regards to how anatomy quizzes are graded can be viewed online at **this link**. Students are strongly encouraged to review this video, and follow up with the instructor if the student has any questions.

Quiz #As are **closed note**, **closed book** assessments. All students are expected to take Quiz #As with integrity, jeopardizing neither their own work, nor that of others.

- **TRAD STUDENTS**
    - All Quiz #As will be given during a station rotation as part of the instructor-led lab, held on **Tuesdays**.
- **DE STUDENTS**
    - DE students are required to take Quiz #As on **Fridays** at **9:00 am**. DE students will need to login to the **Virtual Classroom** and do a sweep of their workstation for the TA or faculty *prior* to being given the password. The quiz is scheduled to take 15-20 minutes. DE students who do not take the quiz during this window will earn a zero and will not be able to make it up.

Please allow up to one week from the due date for the anatomy quiz to be graded and returned.

VIDEO ASSIGNMENTS (3 VA @ 15 POINTS EACH = 45 POINTS)

Video assignments (VA) are video and evaluation assignments.

VA3-VA5 requires students to **video record** themselves performing a specific exam learned and practiced during the week. The video assignments are provided as "practice" to build up student skills for the final exam. They are considered a part of the attendance requirement for this course and are graded.

- **All filming must take place at the LBCC HOC X-Ray Lab for TRAD students and at the assigned clinical site for DE students**.
- Students are **REQUIRED** to **RECORD** themselves positioning a weekly assignment.
- Students are **REQUIRED** to **complete** the filming assignment within a **set** amount of **time**. Going over the designated amount of time generally indicates that additional practice is required. Students are encouraged to practice many times, and then film once. Going over in time results in a loss of one point out of 15 and is not a reason to refilm unless the student feels it is necessary and the student still has time in lab to do so.
- Students are **REQUIRED** to **REVIEW** the video of themselves and then **EVALUATE** their performance.
- Students may utilize the **Video Assignment Evaluation Form** to help identify all of the various tasks a technologist must accomplish during an exam.
    - This is a checklist students may fill out as they watch their videos to help them identify the things they remembered to do and the things they forgot to include. *Students will not turn this paper in.*
- **Do not edit your videos.** You do not have the opportunity to edit (rewind, fast forward, edit things out) with a real patient, and we don't want you to do that with your videos either. It needs to record your exam process in real time! If it is determined you edited your video, you will take a **zero** for that video assignment.
- Students are **REQUIRED** to **REVIEW** each of their videos and **REFLECT** on their own performance by answering the questions included in the weekly Moodle positioning assignment.
- Students are **REQUIRED** to **UPLOAD** the video to **YouTube** each week so faculty can review student progress and provide feedback. Instructions on how to upload videos will be provided.
- Students are **REQUIRED** to set their videos to "**UNLISTED**". Setting videos to either "public" or "private" will result in lost points.
- **Due dates** for the video assignments are **posted** on the **course outline**.

- **Seven faculty members** spend time watching student videos each week and will take turns providing **feedback** to you.
- Video assignments 3-5 will be graded using **this rubric.** Students should review this rubric thoroughly to ensure a clear understanding of how the video assignment will be graded.
- **Assignments must be submitted by the deadline in order to be graded.** This requires students to **select the "SUBMIT" button** within the Moodle assignment. If the assignment is not submitted, it will *not* be graded and the student will earn a zero for that assignment.
- Please allow **one week from the *due date*** for the video assignment to be evaluated by a faculty member, graded and returned.

When you receive email feedback from a faculty member or a peer,
know it is both customary *and* good manners
to **ACKNOWLEDGE** that you ***received*** the **feedback** and
THANK that person for *taking the time* to **give** you **feedback**.

Clinically, if a tech helps you and gives you suggestions or advice,
you would not walk away from them afterwards and say nothing in response.
Please treat **emails** in the same manner as you would a **verbal conversation**.
It is not necessary to cc: Carley in on these emails, but be considerate
of the amount of time your reviewer spends watching and giving you feedback.

BE COURTEOUS AND SAY THANKS!

POSITIONING ASSIGNMENTS (10 PA @ 3-30 POINTS EACH = ~ 100 POINTS)

Assignments that must be completed in the lab utilizing **x-ray equipment** and the **phantoms** will be required each week. Some weeks the assignments are focused on equipment or lab policies/procedures, other weeks students will be required to complete specific exams on the phantom. The phantom images taken by the student will be submitted and students will be required to answer a series of questions reflecting on the exam and the images. **Assignments must be submitted by the deadline in order to be graded.** For positioning assignments completed inside **Moodle**, students will be **required** to click the **"SUBMIT" button** in order to have their assignment turned in and graded.

- **TRAD students** will send images to PACS, verify they crossed appropriately and submit **PA3-PA9** as **paper/pencil** assignments **before they leave practice lab on Fridays**.
- **DE students** will be required to **email** the instructor at **hansenc@linnbenton.edu** with **phantom images** and **answers to reflection questions** by **Fridays at 11:59pm**.

If the assignment is not submitted by the deadline each week, it will not be graded and the student will earn a zero for that assignment.

ADDITIONAL PROJECTS / OTHER ASSIGNMENTS

Students may be assigned weekly individual and/or group assignments/projects throughout the term at the discretion of the instructor. Some additional projects/assignments may be graded and some assignments/projects may not be graded, depending on the task. Completing ungraded assignments/projects is considered to be part of the participation of the course. Please allow up to one week from the due date for the weekly assignment/project/other assignment to be graded and returned.

POP QUIZZES (5 POINTS EACH)

Pop quizzes may be given at any time at the instructor's discretion. Pop quizzes may be given in the Virtual Classroom or in lab. **A ringing cell phone during lab or class will cause a pop quiz to be assigned.** Students absent from class or lab for any reason when a pop quiz is given may not make up the assignment or missed points. Students who are absent or late to lab or Virtual Classroom when a pop quiz is announced, regardless of the reason, may not take the pop quiz and are thus ineligible to earn points on the pop quiz.

As DE students are off-site for labs, pop quiz questions may be incorporated into the DE student's weekly anatomy quizzes, increasing the number of points and questions from 15 to 20.

FINAL ANATOMY (20 POINTS)

The final anatomy assessment will be comprehensive and consist of fill-in-the-blank questions. Students will be shown 20 images and asked to identify one anatomical structure on each. Students will be given 20 minutes in which to complete the assessment. This assessment will take place in the final lab of the term on **Tuesday 8/24 (TRAD students**) or in the proctored final anatomy time slot on **Friday 8/27 at 9:00am** (**DE students**).

WRITTEN FINAL EXAM (200 POINTS)

The final exam will be comprehensive and consist of multiple choice questions. It will be closed note/closed book and proctored in person at the Lebanon site. The date and time of the final exam will be announced as soon as it has been scheduled by the program director. Once a student begins their final exam, they may not leave the testing room. If a student leaves the testing room during the final, the student will only be graded on the portion completed prior to leaving the room. Please plan accordingly.

FINAL PRACTICUM (200 POINTS)

An observed and graded comprehensive practical test (final practicum) will be given during the last week of the term. The date and time of each student's final practicum will be announced as soon as it has been scheduled by the program director. Students will be required to perform the following:

- A **simulated (no live exposure) 2-view exam** on a designated **volunteer** patient, **at Positioning Table 1/2.**

Students will *not* know who the volunteer patient is in advance of the final practicum exam. The volunteer patient will be arranged by LBCC faculty.

Practicums are **CLOSED BOOK**, **CLOSED NOTE**. Resources other than those provided by the evaluators *may not* be consulted during the practicum. Students will be assessed using the practicum criteria grading rubric that will be provided prior to finals week. Practicums will be videotaped and observed by Diagnostic Imaging faculty. Feedback will be provided to students by program faculty and the practicum patient. Once a student begins their practicum, they may not leave the evaluator's presence. If a student leaves during the practicum, they will only be graded on the portion completed prior to leaving the room. Please plan accordingly.

Here is the link to the working draft of the **practicum rubric**. Students will be notified via email when it has been finalized. Students may also review the current working draft of the final practicum competency form linked under "Course Documents." This form may change slightly between Week 0 and Week 5, but students will be notified when the rubric has been finalized. The rubric will be finalized no later than July 31st.

GRADING SCALE
This is a three (3) credit, letter grade course. When these points are combined, the final grading scale is:

A = 91.5 – 100%
B = 82.5 – 91.4%
C = 74.5 - 82.4%
FAIL = ≤ 74.4%

SYLLABUS CHANGE POLICY
Syllabus is subject to change as the instructor evaluates the progress of students and their understanding of concepts.

COURSE FAILURE POLICY
Diagnostic Imaging students must complete each course, including this one, within the Diagnostic Imaging program with a grade of at least 75%. A letter grade of F will be applied to the course if a student scores a 74.4% or below. The Diagnostic Imaging program does not utilize the letter grade "D". Students who can not pass coursework with the minimum standard grade will fail academically, which will then make the student ineligible to proceed in the program. As a result of academic failure, the student will be terminated from the program. Students who fail didactic can only enter the program again through reapplication.

LBCC COMPREHENSIVE STATEMENT OF NONDISCRIMINATION
LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, gender, gender identity, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information see Board Policy P1015 in our Board Policies and Administrative Rules. Title II, IX, & Section 504: Scott Rolen, rolens@linnbenton.edu, 541-917-4425; Katie Winder, winderk@linnbenton.edu, 541-917-535, LBCC, Albany, Oregon. To report: linnbenton-advocate.symplicity.com/public report.

DISABILITY SERVICES POLICY
You should **meet with your instructor** during the **first week of class** if:

- You have a documented disability and need accommodations.
- Your instructor needs to know medical information about you.
- You need special arrangements in the event of an emergency.

If you have documented your disability, remember that you must make your request for accommodations through the Center for Accessibility Resources (CFAR) Online Services webpage every term in order to receive accommodations. If you believe you may need accommodations but are not yet registered with CFAR, please visit the CFAR Website for steps on how to apply for services or call 541-917-4789.

STATEMENT OF INCLUSION
The LBCC community is enriched by diversity. Everyone has the right to think, learn, and work together in an environment of respect, tolerance, and goodwill. I actively support this right regardless of race, creed, color, personal opinion, gender, sexual orientation, or any of the countless other ways in which we are diverse. (Related to Board Policy #1015)